BEMBIDION ARGENTEOLUM AHRENS (COLEOPTERA: CARABIDAE) IN THE BRITISH ISLES

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On 15.viii.1987 I was excited to find a single *Bembidion (Chrysobracteon)* (characterized by the opaque fields or 'silver spots' on the third elytral inverval) at Denge Beach near Dungeness, Kent. It was under a piece of wood on bare, damp sand not far from water in a flooded gravel pit and appeared to be in a 'cell' just beneath the sand, rather than merely under the piece of wood. Under the same piece of wood was a single *B. pallidipenne* (Ill.) and nearby I recorded *Omophron limbatum* (F.) and *Dyschirius obscurus* (Gyll.).

Using the key to *Bembidion* in Lindroth (1985), hopes of a species new to British Isles were soon dashed. It was clearly not *B. litorale* (Ol.) but the margin of the pronotum had setae only at the obtuse hind-angles (ruling out *B. velox* (L.) and *B. lapponicum* Zett.). The specimen, a somewhat teneral female, keyed easily to *B. argenteolum*, not new to the British Isles but previously recorded only from Ireland. Subsequent visits to the site over the years following the initial capture (by myself and other coleopterists) have failed to produce further examples. The species was not represented in samples collected in an intensive invertebrate survey of the shingle beaches at Dungeness (including part of Denge Beach) in 1988 and 1989 (Morris & Parsons, 1991).

B. argenteolum was first recognized as a British species by Johnson & Halbert (1902), following the capture of several specimens at Ardmore, Co. Armagh on the shore of Lough Neagh, in June 1899. The specimens were initially thought to be *B. litorale (B. paludosum)* and reported as that species by their captor (Johnson, 1899). Recognition of their true identity cast serious doubt on previous records of *B. litorale* from the Lough Neagh area.

Kemp (1902) visited Lough Neagh in mid-June, 1902 and collected six specimens of *B. argenteolum* at 'the south-east corner of the lake' (possibly at Ardmore Point). The following month, Johnson (1902) revisited the original locality at Ardmore and with his wife 'managed to take a dozen' examples. The beetles were found on the sandy and shingly parts of the shore, and hid either just below the surface of the sand or under small stones. In the sunshine they emerged from their hiding places. Interestingly, *Dyschirius obscurus* was among the beetles taken with *B. argenteolum*. Johnson (1902) also reported other records of *B. argenteolum*, a specimen labelled 'Shane's Castle, 1831' (Robert Patterson Collection—*B. paludosum* in Patterson, 1838) and 'Glenavy, Co. Antrim, on the eastern shore of Lough Neagh' (H. L. Orr) concluding that the evidence 'points to the presence of the beetle in suitable places all round the lake'.

In spite of this prediction, even though *B. argenteolum* was found repeatedly at Shane's Castle and Ardmore Point (Speight *et al.*, 1983) no additional sites at Lough Neagh are known. The species has not been recorded from Lough Neagh since it was found at Shane's Castle by O. E. Janson on 20.vi.1923 (Janson, 1924; Anderson, pers. comm.). Anderson (1979) failed to find it at apparently suitable sites on the shore of the Lough and the lack of modern records led Speight *et al.* (1983) to presume that *B. argenteolum* was extinct in Ireland.

B. argenteolum is found widely in the Netherlands, Belgium and northern France (Turin *et al.*, 1977), and flies readily in warm sunshine (Lindroth, 1985). The site at Denge Beach, a famous locality for migrant Lepidoptera, is less than 30 miles

from the coast of northern France. It would be easy to conclude that the single *B. argenteolum* found there was a chance migrant from the Continent. However, there are good arguments against this conclusion.

The Denge Beach specimen was slightly teneral which would suggest that it had emerged in the immediate area. It was in a 'cell' in the sand and at the time of collection I thought that this might have been the pupal chamber, even though the larval and pupal 'skins' were not evident. However, Lindroth (1985) remarks that when inactive these beetles usually stay in burrows in the sand and, most likely, the 'cell' that I observed was the remains of such a tunnel.

Denge Beach is part of an incredible expanse of sand and gravel between Lydd and Dungeness. Although not obviously similar to the shores of Lough Neagh there are interesting faunal parallels. *Dyschirius obscurus* was for many years thought to be confined to the sandy shores of Lough Neagh until it was reported from Rye Harbour, East Sussex (Shephard, 1970), which may be regarded as part of the same sand and gravel complex as Denge Beach. It has since been found to be established in the area between Lydd and Dungeness (Luff, 1987). Johnson (1902) recorded *D. obscurus* with *B. argenteolum* at Lough Neagh and I found the two species in the same area at Denge Beach although *D. obscurus* seemed to prefer firmer, damper substrate. The two localities seem to provide a similar microhabitat and substrate is probably the important factor (Andersen, 1978).

It is interesting to note that Lydd is the only locality in south-eastern England from which *Zorochros minimus* (Boisd. & Lac.) has been recorded (Mendel, 1990). This northern and western species in the British Isles is known from Lough Neagh (Johnson & Halbert, 1902; Janson, 1924) and was found at Lydd in 1973 (W. West/R. D. Weale Collection, Colchester and Essex Museum). It was in the course of trying to establish the continued presence of *Z. minimus* in the Lydd area that I found *B. argenteolum*.

It is possible that *B. argenteolum* is a recent arrival to south-east England from the Continent. However, I would be surprised indeed if it was not established in the Denge Beach area.

Acknowledgements

I thank the British Ecological Society for a grant to record and study Elateridae in the British Isles and Mr J. J. Heath (Colchester and Essex Museum) for the loan of Coleoptera from the West/Weale Collection. I am grateful to Dr R. Anderson for advising me of the most recent Lough Neagh record of *B. argenteolum* known to him and Dr M. L. Luff for general advice on continental Carabid literature.

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SHORT COMMUNICATION

Changing breeding habits of Mythimna albipuncta (D. & S.).—In past years including 1989 I have noted that when breeding this species the adults have emerged during December and early January from eggs laid during October from moths taken at mercury vapour light at Freshwater, Isle of Wight. The larvae, which were kept indoors and subject to central heating, fed up quickly on soft grasses pupating in late November and early December.

However during 1990 there was a change of habit in the larvae, experienced by Mr J. L. Fenn and myself from stock obtained during October 1990 from Freshwater. Some of the larvae fed up quickly producing moths in December, the earliest being on 19.xii.90. However some of the larvae partially hibernated during the winter months and produced adults then and on into the spring with the last emerging on 22.iv.91.

I suspect that this recent change of habit is the result of the 1989 generation being one which had over-wintered successfully. The winter of 1989/90 was exceptionally mild and this species may have survived and become temporarily established along the South Coast.

I wonder whether members of the Society to whom I gave ova at the 1990 BENHS Annual Exhibition experienced a similar change in breeding habits in this moth. S. A. Knill-Jones, Roundstone, 2 School Green Road, Freshwater, Isle of Wight.

LETTERS TO THE EDITOR

Euriphene specimen identified.—The specimen from Cameroon depicted in Figure 14 of Plate I of the Journal in Volume 4, Part 1, April 1991 is a female of *Euriphene canui legeriana* Hecq., and is identical to the hitherto unique type in my collection. This came from near Abak in eastern Nigeria west of the Cross River. The male of the subspecies has not yet been described. The nominate subspecies is, I believe, from the island of Fernando Po (currently called Bioko). This species is,